# Joint Regional Security Stack

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# Secure

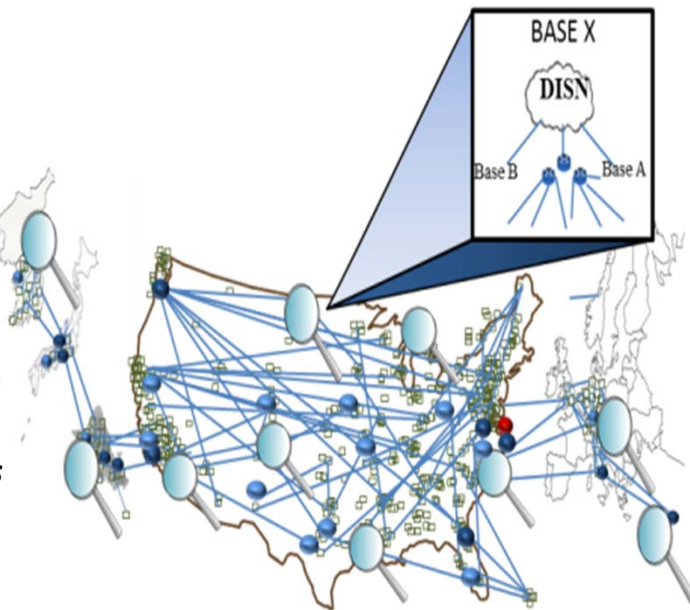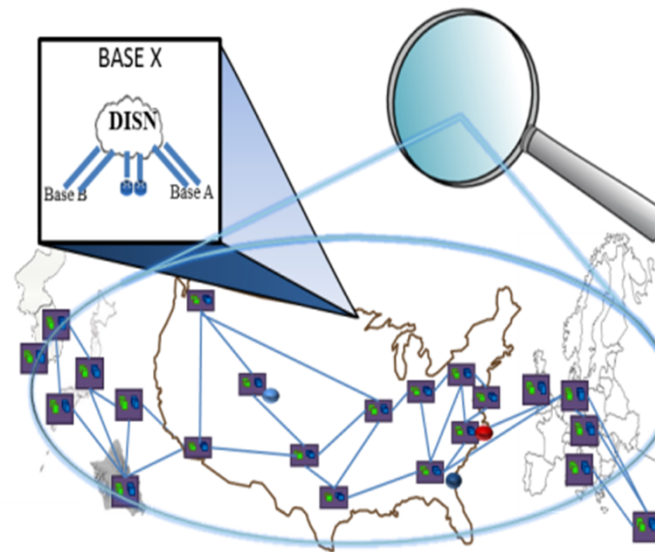| AS IS | TO BE |
|---|---|

*Significant Attack Surface Ineffective and Costly Networks Disparate & Uncoordinated Analysis*

*Reduced Attack Surface Increased Net Resiliency/Capacity & Reduced Cost Improved Cyberspace Detection & Diagnosis Tailored Operational Views*

# Joint Regional Security Stacks

## *NIPR JRSS 1.0/1.5 Operational Effects*

- **Provides network defenders real-time capability to:**
  - **Joint C2 and visibility of network and regional security resources at strategic/operational levels**
  - **View DoD installation network status and track cyber events**
  - **Monitor millions of internal DoD WWW transactions daily**
  - **Block known hostile traffic**
  - **Record all network transactions for later forensics (v1.5)**
  - **Prioritize traffic flows by community of interest**

| CAPABILITIES |
|---|
| SSL Inspection, agency-level intrusion protection system (IPS), agency level firewall, agency/base intrusion detection system, base IPS, application firewall, **full packet capture (v1.5)**, and ability to support multiple virtual Service/Agency policies and TTPs |
| Sunsets AF Gateways/Army TLAs |

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# Joint Regional Security Stacks

### *NIPR JRSS 2.0 Operational Effects*

- **JRSS 2.0 adds the following effects:**
  - **Additional defense in depth capabilities at strategic, operational and <u>tactical</u> (i.e., B/P/C/S) levels**
  - **Greater fidelity of cyber vulnerability screening/filtering**
  - **Data/Applications defense in depth**
  - **Advanced & fine-grain inspection of DoDIN traffic**
  - **WAN traffic optimization for data/application support**

| ADDITIONAL CAPABILITIES |
|---|
| Base-level web content filtering/enhanced application firewall/IPS, detonation chamber (inspect atchs),break & inspect encrypted capability (SSL/PKI), base-level in-line virus scanning, WAN acceleration, and enhanced logging/analysis capabilities |
| Sunsets DON/DHA Gateways |

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# SIPR JRSS

## *(S-JRSS v1.0)*

**S-JRSS Operational Effects:**

– **Provides network defenders real-time capability on SIPRNet:**

- Joint C2 and visibility regional security resources at strategic/operational levels
- View DoD installation network status and track cyber events
- Block known hostile traffic

**S-JRSS Capabilities:**

- Agency-level intrusion protection system (IPS)
- Agency level firewall
- Ability to support multiple virtual Service/Agency policies and TTPs
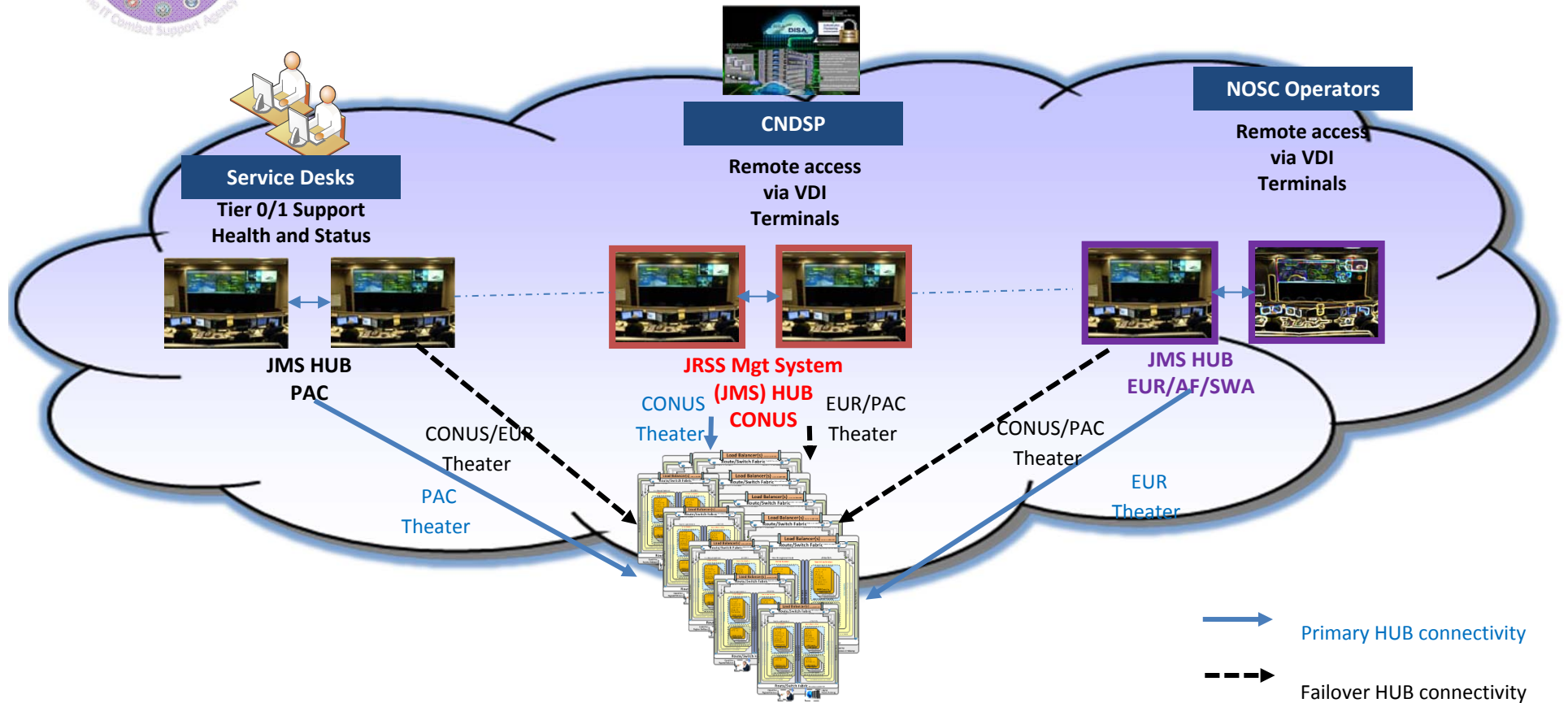
**S-JRSS Architecture Plan:**

- Existing crypto at installation sites, and existing GRE-capable routers
- Uses GRE Tunnels (i.e., BPCS to BPCS and S-JRSS)
- Deploy S-JRSS in non-Internal High Availability (HA) Configuration
- S-JRSS provides Agency-Level Security and enclave Security Protection though inheritance
- The SIPR procurement included 6 full JMS's (2 CONUS, 1 EUR, 1 SWA, 2 PAC)

## Sunsets AF SIPR Gateways; Adds Army regional layer

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# Operate

**Service Desks**

Tier 0/1 Support
Health and Status

**CNDSP**

Remote access
via VDI
Terminals

**NOSC Operators**

Remote access
via VDI
Terminals

JMS HUB
PAC

**JRSS Mgt System
(JMS) HUB
CONUS**

JMS HUB
EUR/AF/SWA

CONUS
Theater

EUR/PAC
Theater

CONUS/EUR
Theater

CONUS/PAC
Theater

PAC
Theater

EUR
Theater

→ Primary HUB connectivity

--→ Failover HUB connectivity

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# JRSS Global Overview



Legend:
- ○ NIPR JRSS
- ○ SIPR JRSS
- ⊙ PLANNED
- ⊙ PROCURED
- ⊘ **INSTALLED** — Equipment racked and cabled
- ● *ACTIVATED* — Baselined, STIGed, ready for traffic
- ● MIGRATED — Passing operational traffic

| CONUS | EUROPE | SWA | PACIFIC |
|---|---|---|---|
| 11 NIPR JRSS Locations | 2 NIPR JRSS Locations | 3 NIPR JRSS Locations | 8 NIPR JRSS Locations |
| 11 S-JRSS Location | 4 S-JRSS Locations | 2 S-JRSS Locations | 8 S-JRSS Locations |

- 🟩 40Gbps or 20Gbps NIPR JRSS
- 🟥 10Gbps SIPR JRSS

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# Timeline

**FY14**    **FY15**    **FY16**    **FY17**    **FY18**    **FY19**

OPS TESTING ◇

San Antonio Ops Decision (Sep 14)

JRSS INSTALLS / NET UPGRADES ◇

JRSS v 1.0: CONUS/EUROPE/ SWA Focus
(50% Global Reqt)

JRSS 1.5: USAF/USA Stand Down Legacy Capabilities
80% Global Reqt (50% in Europe, Africa, Pacific)

JRSS INSTALLS / NET UPGRADES ◇

◇ USN collapses B1s

★

◇ JRSS 2.0 / Tech Refresh ◇

| | 1.0 |
| ◇ | 1.5 & SIPR Milestone |

*Expanding Cyber C2 Capabilities*

JFHQ DODIN ◈ CYBER MISSION/PROTECTION FORCES
Activated

JRSS Version 2.0
(USN/USMC/DHA
Enhancements)

USN/USMC/DHA
Migration 100%
Global Reqt

SIPR Migrations
(Army & AF)

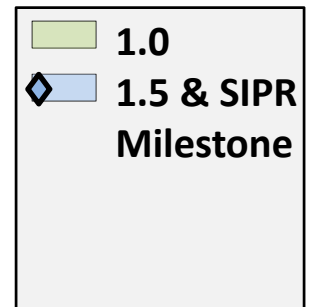**DOD Installations Connected**

400+ Sites
Improved C2 and SA
Added Resiliency/Capacity
Increased Sharing of Threat Data

300 Sites

100 Sites

1000+ Loosely Controlled
Entry Points

**Reduced Attack Surface**

50 Robust Entry Points

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# Your Roles

## Combatant Commands / Services / Agencies

- **Secure / Operate / Defend**
  - Perform Computer Network Defense Service Provider & Defensive Cyber Operations Missions with support of JRSS (NIPR & SIPR)
  - Train on and leverage new JRSS capabilities for CC/S/A operational effects

- **Migrations**
  - Ready CC/S/A networks for migration to the new capability
  - Provide CC/S/A migration priorities
  - Actively participate in migration process

- **Future Requirements**
  - Provide feedback to DISA on capabilities for posturing future requirements
  - Support funding requirements in the POM

## Industry

- **Development - Multi-tenant product lines / smaller, more efficient platforms**

- **Partnerships – O&M and Innovation**

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# Contact/POC Information

## Information

**www.disa.mil/Initiatives/JRSS**

## Program External DEPS Link

**https://east1.deps.mil/disa/cop/mae/cop_mae/JRSS/JRSS%20Documents/Forms/AllItems.aspx**

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The IT Combat Support Agency